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Selected Speeches and News Releases

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Statement

U.S. Department of Agriculture • Office of Information

Prepared for delivery by Secretary of Agriculture, Clayton Yeutter, before the House Committee on Agriculture, May 11.

Mr. Chairman and members of the committee, I am pleased to appear here today to discuss Third World debt and U.S. agricultural policy and trade.

Third World debt is one of the most serious constraints to U.S. agricultural trade in the 1980's. Other factors such as a strong U.S. dollar, high U.S. prices relative to world prices, EC export subsidies and slow growth in global trade in general also constrained U.S. agricultural exports during the 1980's. The Third World Debt problem alone has reduced U.S. agricultural exports about \$3 billion annually. The debt problem has also proved to be highly intractable and could continue to limit the growth of the world economy for years to come. The resolution of this issue is one major precondition for the return to more normal patterns of agricultural trade and development.

Developing countries have been the fastest growing market for traditional U.S. agricultural exports. The promise that they hold, and one which they largely met during the 1970's, is of a sustained increase in demand fostered by rapid economic growth. During the 1970's, developing countries increased their purchases of U.S. farm products by 11 percent per year, after inflation. By contrast, in the 1980's, their purchases declined at an annual rate of 4 percent. Yet, despite this fall, the developing world's share of U.S. agricultural exports has risen to over 40 percent. This represents a continuation of the steady increase in the importance of developing countries to U.S. farmers that began in earnest during the 1970's and emphasizes how important it is for U.S. agriculture that the financial constraints induced by the debt problem be removed.

Third World Debt and U.S. Agricultural Exports

The debt problem has constrained the growth in import demand in two important but fundamentally different ways. The immediate response to a debt repayment problem is to reduce imports. This frees foreign exchange

for debt payments. There is dramatic evidence that debt affected-developing countries have, in fact, done this. In the longer term, debt payments compete with investment for national savings. This has the effect of reducing long-term growth of developing economies which has been the driving force behind growth in demand for U.S. agricultural products. There is considerable evidence of substantial declines in both the rate of capital formation and the rate of economic growth of debt-affected developing countries since the debt problem became acute in 1982.

The situation can be seen most clearly by looking at the pattern of U.S. agricultural exports to these highly indebted nations. Between 1973 and 1981, the average real rate of growth of U.S. agricultural exports to countries currently classified as "problem" debtors showed an average increase of 15 percent annually. However, between 1981 and the end of 1987, there has been a 10 percent annual decline. The share of total U.S. agricultural exports going to "problem" debtor countries rose to 14 percent in 1980 but has since fallen to 10 percent. The outlook, without a solution to the debt situation, is for these countries to become a largely stagnant market for U.S. agricultural products.

In the longer term, the constraints that have effectively limited import demand have been the cause of declining developing countries incomes both in absolute and relative terms. Real income growth per capita of the developing countries averaged about 1.0 percent a year between 1980 and 1986 compared with about 3.0 percent in the 1970's. As for "problem" debtor countries, real per capita income growth in the 1980's was a negative 2.4 percent.

Real income growth in the most heavily indebted developing nations is directly related to the flow of financial resources. Between 1973 and 1981, when financial capital flowed to developing countries, investment increased and incomes rose. The period of the 1980's has been one of substantial capital outflows. Whereas, on average, the developing countries received net financing of more than \$30 billion a year between 1974 and 1981, they paid out \$30 billion dollars in extra repayments per year since 1984. The consequence is that the most heavily indebted nations have seen capital formation fall from an average of over 27 percent of national income during the 1970's to below 18 percent in the 1980's. The resultant slow economic growth has reduced demand for U.S. farm products.

The impact of debt constraints is not limited to U.S. agricultural trade. The real level of overall U.S. trade has fallen off. Measured in 1980 dollars, the U.S. has been exporting 2 percent less every year, on average, to the developing world over this decade. Again, the losses are concentrated in the most heavily debt-affected regions: Latin America, North Africa and Sub-Saharan Africa. The risk is that the role of these nations in the world trading system could continue to diminish, to the detriment not only of their own economies but to the United States as well.

In contrast to the debt-constrained countries, the Four Tigers of East and Southeast Asia (Hong Kong, the Republic of Korea, Singapore and Taiwan) have used their burgeoning export earnings to increase their purchases of agricultural and nonagricultural goods. There is no clearer evidence that economic growth is preferred to declines not only for the countries in question but also for their trading partners.

With time and better policies by both lenders and borrowers, the benefits of renewed growth can be shared by the debt burdened developing countries and U.S. farmers. The debtor nations, both with and without repayment problems, have been good customers in the past. They have also demonstrated that this is where our growth markets in agriculture lie by remaining a significant share of U.S. sales despite financial constraints.

U.S. Plans to Ease Debt Constraints of Debtor Nations

There has been a promising evolution toward a more flexible, market oriented debt strategy such as the proposal in March by Treasury Secretary Brady. The Brady plan relies on international organizations, governments and commercial banks to become involved in a three-pronged effort: debt reduction, the provision of new funds and the economic policy reforms necessary for developing countries to embark upon a strong growth path.

This strategy will help defuse the immediate debt crisis. Yet we need to recognize that these are only the first steps in overcoming debt constraints and that Third World debt will continue to be a serious impediment to trade for some time to come.

First of all, the magnitude of developing countries' debt will continue to have a dampening effect on attempts to achieve more rapid growth. Developing countries now hold almost \$1.2 trillion worth of international

debt. In the last two years, voluntary debt reductions by private banks, mainly through discount sales in the secondary loan markets, have already reduced developing countries debt by about \$24 billion.

The burden which debt payments are having on these economies is staggering. For all developing countries, debt service payments have exceeded 20 percent of exports for the decade of the 1980's. This compares with only 12 percent for the decade of the 1970's. For the problem debtor countries, debt service payments have exceeded 40 percent of export earnings in the 1980's. On average, debt service payments for all developing countries have averaged 4 percent of GDP in the 1980's and more than double that for the most affected countries. Such a debt burden seriously impairs their ability to invest for the future and is highly correlated with the declines in gross domestic capital formation observed in the 1980's.

A decade of debt repayment problems has irrevocably affected developing countries' long term economic capacity. They are attempting to embark on a renewed growth path from weakened economic positions. The real income of the average person in the most indebted countries is 7 percent less than it was at the beginning of this decade. Strong growth is needed just to attain the level of per capita income of 1980 and even stronger growth is needed to recapture the losses in income growth sustained by the lingering debt problem.

The most important element in the long-term solution to the debt crisis is policy reform. The developing countries need to adopt sound trade, structural, fiscal and monetary policies that are conducive to growth. Policy distortions that result in inefficient use of their limited resources cannot be afforded.

Reforms in the developed countries are also important. Policy-induced distortions that permeate our world trade system are a serious barrier to the rational development of export industries needed in developing countries. The removal of trade distorting policies of developed countries will help facilitate the reform of developing countries economies.

Reducing Barriers to Trade Has a Role to Play

The United States, the European Community, Japan and other industrialized nations have employed an array of domestic and trade policies that influence agricultural markets and foreign exchange earnings of developing countries. The effect of these policies has been to increase

agricultural production in the industrial nations and reduce world commodity prices. Lower world prices discourage agricultural production in developing countries and diminish their export earnings. Since agriculture is such a large and vital component of their economies, long-term economic growth in the developing countries has been adversely affected.

It has been estimated by the Economic Research Service that the agricultural policies of industrial countries have cost farmers in developing countries over \$16 billion in annual income (based on a 1986 analysis). The European Community's policies have the largest negative impact on developing countries, approximately \$8 billion. Japanese and U.S. agricultural policies each cost developing country farmers over \$4 billion. If developing countries liberalize their agricultural policies along with industrial countries, the income benefit to developing countries would be more than three times that if only industrial countries liberalize.

Agricultural policies in industrial economies are costing developing countries approximately \$6 billion in net agricultural exports. Developing country exporters—Argentina, Brazil, Indonesia, Malaysia, the Philippines and Thailand—lose \$4 billion of exports annually, mainly in ruminantdgats, grains, and sugar. These countries have large foreign debts and additional exports would ameliorate their foreign exchange shortages. Developing country importers incur additional foreign exchange costs of about \$2 billion annually due to the policies of industrial countries. As a consequence, developing country importers produce less food, mostly rice.

Liberalizing U.S. agricultural policies could lead to an additional \$1 billion in net annual exports by developing countries or 15 percent of the potential increase from altering industrial economy policies. European Community and Japanese policy changes account for a potential \$2 billion each in increased exports by developing countries. These estimated trade gains are very small compared to the foreign exchange needs of the developing countries. However, they certainly would constitute a step in the right direction.

U.S. Agricultural Policies And Debtor Countries

There are several U.S. agricultural policies that have the effect of reducing the immediate foreign exchange requirements needed to buy U.S. products. They include short-term and medium-term commercial

credit guarantees (GSM-102 and GSM-103), as well as long-term concessional credit and donations under Public Law 480 and Section 416.

Export credit and credit guarantee programs have facilitated an increasing share of U.S. exports to developing countries. Between 1980 and 1982, approximately 20 percent of U.S. exports to developing countries occurred under these programs. This share rose to 35 percent during the 1982 through 1988 period, when commercial banks reduced credit to the developing world. In some countries, export programs play a much larger role. In 1988, over 55 percent of Mexico's purchases of agricultural commodities were assisted by short-term credit guarantee programs.

Buyers in some developing countries may also benefit from the export enhancement program (EEP) which enables them to purchase selected U.S. agricultural commodities at prices below domestic levels. Since 1985, over 50 percent of EEP wheat sales, (the largest component of the EEP), were to importers in developing countries.

Conclusions

The Third World debt problem has been a major constraint to exporting U.S. agricultural products to developing countries in recent years. This is particularly evident in those countries most affected by debt repayment problems. As the developing countries have been our fastest growing markets, this is of particular concern to the U.S. agricultural sector.

Several recent proposals are major steps in the right direction. However, given the magnitude of the problem, we must realize that Third World debt will continue to restrict U.S. export opportunities for some time to come.

The current multilateral negotiation on agriculture under the auspices of the General Agreement on Tariffs and Trade (GATT) could have a substantial impact on expanding the export potential of developing countries. Trade liberalization in industrial countries alone could lead to an annual increase of \$6 billion in net exports by developing countries. Furthermore, the benefits of policy reforms in developing countries imply substantially higher trade gains for them.

U.S. agricultural policies in the form of export credit guarantees and Public Law 480 and the export enhancement program have played a significant role in helping to maintain U.S. exports in the face of the financial constraints operating on developing countries. Almost \$5 billion

in assistance was given through these programs in 1988, accounting for approximately 35 percent of our agricultural exports to developing countries.

Finally, solutions must be found for reducing the debt repayment burden of developing countries if they are to realize their potential as markets for U.S. agricultural exports. Reducing this burden is not only in the interest of developing countries but U.S. farmers as well.

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**Prepared for delivery by Secretary of Agriculture, Clayton Yeutter,
Concerning Health Risks Associated with the Chemical Alar, May 15.**

Last night CBS's "60 Minutes" aired a second segment on the health risk of consuming apples that have been treated with the chemical Alar. Though more balanced than the first segment, aired several weeks ago, last night's effort still did not accurately assess the situation.

The CBS program continually asserts that Alar is a "carcinogen," meaning that it causes cancer. It is important to realize that we are exposed to carcinogens on a daily basis. Sunlight is a carcinogen; carcinogens are found in natural form in some of our most nutritious foods.

Alar, when consumed in large doses, far beyond anything contemplated for human consumption, may cause cancer in rodents. Because of that finding the Environmental Protection Agency has moved to phase out its usage. That action is being taken out of extreme caution.

The National Academy of Sciences, an independent scientific body, recently released a 1,400-page study which suggests that Americans eat more fruits and vegetables. In developing this study, the scientific experts considered the relationship of eating more fruits and vegetables to potentially ingesting chemical residues, and concluded that Americans should increase their intake of these food groups because the benefits by far exceed any potential risks.

The U.S. Department of Agriculture, the Environmental Protection Agency, and the Food and Drug Administration will continue to closely monitor this and all other food safety issues and will act swiftly if a problem is identified. It is imperative that we let sound scientific data drive public policy debate, rather than hysteria.

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News Releases

U.S. Department of Agriculture • Office of Information

USDA CONSIDERS CHANGE IN HORSE PROTECTION ACT GUIDELINES FOR INSPECTORS

WASHINGTON, May 11—The U.S. Department of Agriculture is seeking public comment on a possible proposal to spell out more specific guidelines for inspectors who examine horses for soreness before shows.

“Representatives of the horse industry and animal welfare organizations have suggested that current guidelines, which include the palpation of the horse’s pastern (ankle area) and a visual examination of the horse, are not detailed enough to ensure a uniform and adequate inspection,” said James W. Glosser, administrator of USDA’S Animal and Plant Health Inspection Service.

“A clarification of inspection procedures would probably result in a more thorough examination of horses inspected under the Horse Protection Act,” Glosser said. “Therefore, we’re now soliciting comments on how to do this in order to detect sore horses most effectively.”

Until 1979, pre-show inspections of horses were carried out exclusively by APHIS personnel, according to Glosser. Responding to congressional mandate in 1979, APHIS established procedures under which other “designated qualified persons” can be trained to conduct such inspections. These individuals are trained and licensed under an industry-sponsored program that APHIS certifies and supervises.

Any new guidelines would be developed under the authority of the Horse Protection Act, which APHIS administers. Passed in 1970, the Act is aimed at eliminating the practice of “soring,” the use of cruel methods, devices or chemicals on a horse’s legs or feet that cause pain when walking. Soring is done primarily to alter a horse’s gait in the show ring.

This advance notice of proposed rulemaking will be published in the May 12 Federal Register. Persons wishing to comment on the guidelines should send an original and three copies to Helene R. Wright, Chief, Regulatory Analysis and Development, PPD, APHIS, USDA, Room 866, Federal Building, 6505 Belcrest Road, Hyattsville, Md. 20782.

Comments should refer to docket number 89-057 and be received by July 11.

Comments sent to APHIS may be inspected at USDA, Room 1141-S., 14th Street and Independence Avenue, S.W., Washington, D.C. 20250, between 8 a.m. and 4:30 p.m., Monday through Friday except holidays.

Bonnie Aikman (301) 436-6573

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USDA ANNOUNCES NO DEFICIENCY PAYMENTS FOR 1988-CROP ELS COTTON

WASHINGTON, May 11—No deficiency payments will be made under the 1988-crop extra long staple (ELS) cotton program because the national average market price exceeded the established target price of 95.7 cents per pound for ELS cotton, according to a U.S. Department of Agriculture official.

Vern Neppl, acting executive vice president of USDA's Commodity Credit Corporation, said the national average price received by producers during the eight-month marketing period, August 1988 through March, was \$1.15 per pound.

Eligible ELS cotton producers receive a deficiency payment when the national average market price received by producers is below the target price during the marketing period.

Bruce Merkle (202) 447-6787

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USDA ANNOUNCES PREVAILING WORLD MARKET PRICE FOR UPLAND COTTON

WASHINGTON, May 11—Under Secretary of Agriculture Richard T. Crowder today announced the prevailing world market price, adjusted to U.S. quality and location (adjusted world price), for Strict Low Middling (SLM) 1-1/16 inch (micronaire 3.5-4.9) upland cotton (base quality) and the coarse count adjustment in effect from 12:01 a.m. Friday, May 12, through midnight Thursday, May 18.

Since the Adjusted World Price (AWP) is above the 1987 crop and 1988 crop base quality loan rates of 52.25 and 51.80 cents per pound,

respectively, the loan repayment rate for 1987 crop and 1988 crop upland cotton during this period is equal to the respective loan rates for the specific quality and location.

Because the loan repayment rate for 1988 crop upland cotton in effect during this period is above the established loan rate, loan deficiency payments are not available for 1988 crop upland cotton sold during this period.

The AWP will continue to be used to determine the value of upland cotton that is obtained in exchange for commodity certificates.

This period represents Week 4 of the 6-week transition period from using current shipment prices to using forward shipment prices in the AWP calculation. The procedure was adopted to avoid a dramatic change in the AWP that could occur with no transition period, due to differences between new and old crop price quotes.

For Week 3 and Week 4, the Northern Europe price = (Northern Europe current price + Northern Europe forward price)/2. Similarly, the Northern Europe coarse count price = (Northern Europe coarse count current price + Northern Europe coarse count forward price)/2. In calculating the adjustment to average U.S. spot market location, Thursday's current shipment prices for U.S. Memphis territory and the California/Arizona territory as quoted for Middling 1-3/32 inch cotton C.I.F. northern Europe were used.

Based on data for the week ending May 11, the AWP for upland cotton and the coarse count adjustment are determined as follows:

Adjusted World Price	
Northern Europe Price	76.45
Adjustments:	
Average U.S. spot market location	12.08
SLM 1-1/16 inch cotton	2.00
Average U.S. location	0.42
Sum of Adjustments	<u>-14.50</u>
ADJUSTED WORLD PRICE	61.95 cents/lb.

Coarse Count Adjustment	
Northern Europe Price	76.45
Northern Europe Coarse Count Price	<u>-71.00</u>
	5.45
Adjustment to SLM 1-inch cotton	<u>-4.15</u>
COARSE COUNT ADJUSTMENT	1.30 cents/lb.

The next AWP and coarse count adjustment announcement will be made on May 18.

Charles Cunningham (202) 447-7954

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USDA TO HOLD MEETING TO EXPLAIN LICENSING OF VETERINARY BIOLOGICS

WASHINGTON, May 15—The U.S. Department of Agriculture will hold a meeting July 6 and 7 in Ames, Iowa, to explain licensing methods and procedures for companies marketing veterinary biologics.

The meeting is especially designed for companies marketing only interstate or for export. Such companies are currently exempt from licensing requirements, but they need to obtain licenses by Jan. 1, 1990, to continue selling their products in the United States.

We are holding this meeting to explain the licensing process for companies which may not have had previous experience with our procedures," said Larry B. Slagle, acting administrator of USDA's Animal and Plant Health Inspection Service.

We will explain compliance options that are open to the companies, different types of licenses, what our inspectors will look for in their facilities, product testing procedures, and how to file the necessary

paperwork," Slagle said. "We will also answer any questions the registrants may have."

Under the 1913 Virus-Serum-Toxin Act, APHIS has responsibility for ensuring the purity, safety, potency and effectiveness of veterinary biological products sold interstate and exported. In 1985, the Food Security Act broadened this responsibility to include intrastate and export-only companies, but it provided a four-year exemption to allow such companies time to obtain licenses. Slagle said APHIS will consider extending the exemption on a case-by-case basis for a maximum of 12 months.

The meeting will be held in the Scheman Building at the Iowa State Center of Iowa State University from 8 a.m. to 5:30 p.m. on July 6 and from 8 a.m. until noon on July 7. There is no registration fee, but participants will be asked to pay for lunch when registering.

For registration forms, a complete agenda or more information, contact David Espeseth, USDA-APHIS-BBEP, Room 838 Federal Building, 6505 Belcrest Road, Hyattsville, Md., 20782, (301) 436-8245.

Anita K. Brown (301) 436-7799

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VET BIOLOGICS MANUFACTURERS' LICENSING EXEMPTIONS TO EXPIRE AT END OF 1989

WASHINGTON, May 15—Veterinary biologics manufacturers exempted from licensing under the 1985 Food Security Act must obtain licenses or approval for exemption extensions from the U.S. Department of Agriculture by Jan. 1 to continue selling or shipping their products in or from the United States.

The act requires makers of U.S. veterinary biologics to obtain a license from USDA's Animal and Plant Health Inspection Service, but also allowed makers shipping products only intrastate or for export to apply for exemptions to allow time to obtain the licenses. Fifty-seven manufacturers filed for exemptions by Jan. 1, 1987. Those exemptions will expire Dec. 31.

According to APHIS Acting Administrator Larry B. Slagle, requests to extend exemptions for a maximum of 12 months will be considered on a case-by-case basis. Slagle said firms need to be licensed for each product

shipped in or from the United States. Applications for exemption extensions must be received by Oct. 1.

Veterinary biologics are products designed to diagnose, prevent or treat animal diseases. Under the 1913 Virus-Serum-Toxin Act, APHIS is responsible for ensuring that all such products are pure, safe, potent and effective. Firms seeking licenses for their products must present scientific data and protocols demonstrating that their products comply with APHIS standards.

Those needing license applications or more information should contact Dr. David Espeseth, USDA-APHIS-BBEP, Room 838 Federal Building, 6505 Belcrest Road, Hyattsville, Md., 20782.

Anita K. Brown (301) 436-7799

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USDA TO INCREASE FEES FOR MEAT GRADING AND CERTIFICATION SERVICES

WASHINGTON, May 16—The U.S. Department of Agriculture will increase its hourly fees charged for voluntary meat grading and certification services, effective July 2.

J. Patrick Boyle, administrator of USDA's Agricultural Marketing Service, said the fee increases would offset higher costs associated with employee salaries, travel and health benefits.

The fee increases are:

- from the current \$27.40 to \$28.80 for “base hours,” (40 hours per week) for “commitment applicants,” i.e., plants using graders full time;

- from the current \$29.80 to \$31.20 for base hours for “non-commitment applicants,” i.e., plants using graders intermittently or part-time;

- from \$35.40 to \$36.80 for “premium hours,” i.e., overtime on any day, and any work prior to 6 a.m. and after 6 p.m. weekdays; and

- from \$54.80 to \$57.60 for holiday hours for any user.

USDA's meat grading service identifies yields and quality of carcasses. Its meat certification service provides large-scale buyers reliable verification that their meat suppliers fulfill contract specifications.

Under law, these services are provided to users on a fee basis. The fees must approximate service costs.

The changes will appear as a final rule in the May 18 Federal Register. Further information may be obtained from Eugene M. Martin, Livestock and Seed Division, AMS, USDA, Rm. 2638-S, P.O. Box 96456, Washington, D.C. 20090-6456; telephone (202) 382-1113.

Clarence Steinberg (202) 447-6179

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USDA ANNOUNCES PREVAILING WORLD MARKET RICE PRICES

WASHINGTON, May 16—Acting Under Secretary of Agriculture John B. Campbell today announced the prevailing world market prices of milled rice, loan rate basis, as follows:

- long grain whole kernels, 11.41 cents per pound;
- medium grain whole kernels, 10.69 cents per pound;
- short grain whole kernels, 10.60 cents per pound;
- broken kernels, 5.71 cents per pound.

Based upon these prevailing world market prices for milled rice, rough rice world prices are estimated to be:

- long grain, \$7.05 per hundredweight;
- medium grain, \$6.69 per hundredweight;
- short grain, \$6.37 per hundredweight.

The prices announced are effective today at 3:00 P.M. EDT. The next scheduled price announcement will be made May 23 at 3:00 P.M. EDT, although prices may be announced sooner if warranted.

Gene Rosera (202) 447-7923

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FGIS REVISES U.S. RICE STANDARDS

WASHINGTON, May 17—The U.S. Department of Agriculture's Federal Grain Inspection Service today announced revisions in the U.S. rice standards, including adding rough rice as a separate category for heat-damaged kernels and changing the special grade "weevily" to the more inclusive term "infested."

In addition, FGIS is revising the U.S. standards for rough rice, brown rice for processing, and milled rice by incorporating insect infestation

tolerances into the standards and revising the rounding methods to a more generally accepted mathematical procedure. The revisions also eliminate many footnotes and footnote references throughout the standards and incorporate the information into the text.

The revisions include other miscellaneous, nonsubstantive changes that simplify the standards and provide for uniform provisions and language.

Notice of this final rule will be published May 18 in the Federal Register. For more information, contact Lewis Lebakken Jr., USDA, FGIS, Room 0628-S, P.O. Box 96454, Washington, D.C. 20090-6454; telephone (202) 475-3428.

Allen Atwood (202) 475-3367.

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USDA LOOKING TO BREAK LINK IN AFLATOXIN CHAIN

WASHINGTON, May 18—Scientists are working to remove or alter genes in fungi critical to the production of aflatoxin.

It may be possible to do this within the next five years through genetic engineering, said Thomas E. Cleveland, a scientist with the U.S. Department of Agriculture's Agricultural Research Service who spoke today in New Orleans at the 39th annual meeting of the American Society of Microbiology. That would stop fungi from making toxin, which has been found to be carcinogenic, he said.

Aflatoxin is produced by two soil fungi—*Apergillus flavus* and *A. parasiticus*. Genes in the fungi send messages to enzymes that produce aflatoxin. USDA research is aimed at two enzymes that aflatoxin needs in the late stages of its growth. The enzymes were first identified in 1986 by Cleveland and Deepak Bhatnagar, also an ARS scientist.

“What we’re trying to do is to find out how and why the fungus makes the toxin,” said Cleveland, a microbiologist at the Food and Feed Safety Laboratory in New Orleans. The toxin, which can be found in crops like corn, cotton and peanuts, generally occurs during a drought.

A single gene could control the release of one enzyme, and once the gene is located, he said scientists could either remove the gene from the fungus or determine what causes the gene to release the enzyme.

Scientists also could make a fungus without the gene that controls release of the aflatoxin-producing enzyme, and as the fungi multiply, the gene would be absent, Cleveland said. It is unlikely that the aflatoxin-

producing genes could be transferred from sister fungi, he added. Experiments are underway by Peter Cotty, a plant pathologist at the New Orleans lab, to ensure that such a transfer doesn't occur.

Cleveland compared this break in aflatoxin production to making a cotton shirt. "You might have the cotton, but you still need the factory to make the shirt," he added.

He said the two enzymes he identified are methyl-transferase and oxido-reductase. Both are specific enzymes found in the fungi.

While aflatoxin is produced after the fungus ceases growing, Cleveland said his research group found two additional steps in the chemical sequence needed to produce aflatoxin. Each of these chemical steps, now totaling at least 10, depends on a single enzyme. All the steps must occur before aflatoxin is produced, he said.

While the fungi may differ in how they affect various crops, the same chemical change occurs inside the fungus on each crop, Cleveland said.

"If you're from Louisiana and visit North Dakota, you might change the way you dress, but you're not going to change your appetite," Cleveland said. "Nothing changes inside of you. The same is true here in the case of the fungus."

For the past 15 years, scientists have known that enzymes within the fungus facilitate aflatoxin production, Cleveland said. But at the New Orleans lab, Cleveland and Bhatnagar were the first to obtain a pure aflatoxin-producing enzyme.

"For 30 years there has been research on various ways to control aflatoxin production by the fungus," Cleveland said. "This research has resulted in somewhat of a decline in aflatoxin contamination. It's been a long process, but the aflatoxin problem still persists."

The Food and Drug Administration requires that grain with 20 parts per billion or more of aflatoxin not be sold for human consumption or for animal feed.

Bruce Kinzel (301) 344-2739

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USDA ANNOUNCES MEETING OF SWINE HEALTH PROTECTION COMMITTEE

Washington, May 18—The Advisory Committee for Swine Health Protection will meet from 8:15 a.m. to 4:30 p.m., June 8, in Washington, D.C., the U.S. Department of Agriculture announced today.

The meeting, which is open to the public, will be in Room 104-A of USDA's Administration Building, the Mall.

According to Larry B. Slagle, acting administrator of USDA's Animal and Plant Health Inspection Service, the meeting will give committee members and the public an opportunity to provide the secretary of agriculture with opinions and recommendations on the policies and activities of the swine health protection program.

Those interested in the swine health program may comment at the meeting or send written comments by June 7 to Dale C. Gigstad, senior staff veterinarian, Swine Diseases Staff, VS, APHIS, USDA, Room 735-A, Federal Building, 6505 Belcrest Road, Hyattsville, Md. 20782. Written comments should refer to Docket Number 89-080.

Janna Evans (301) 436-7799

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